

## REMARKS/ARGUMENTS

### I. Introduction:

Claims 2, 8, 14, and 20 are amended herein. Claims 1-24 are currently pending.

Applicants acknowledge the Examiner's allowance of claims 2, 8, 14, and 20 if rewritten in independent form including the limitations of the base claim. Claims 2, 8, 14, and 20 have been amended to include their respective base claims, and as amended, are believed to be in proper form for allowance.

### II. Claim Rejections – 35 U.S.C. 103:

Claims 1, 17, 13, and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2004/0259555 (Rappaport et al. ('555)) in view of U.S. Publication Nos. 2004/0106410 (Choi et al.), 2002/015935 (Nelson Jr. et al.), and 2004/0236547 (Rappaport et al. ('547)).

Rappaport et al. ('555) is directed to a system for automated placement of equipment for obtaining desired network performance. As noted by the Examiner, Rappaport et al. ('555) does not disclose determining a capacity indicator based on path loss, determining a data rate indicator or a cell loading indicator, or determining a client throughput based on a capacity indicator, data rate indicator, and cell loading indicator.

The Examiner cites Choi et al. as disclosing determining a capacity based on path loss information. Choi et al. disclose calculating a same-cell interference and adjacent-cell interference using path loss information between base stations. Path loss information is calculated according to pixel-based traffic volume and a predetermined traffic carrying capacity of the base station. Choi et al. do not show or suggest determining a capacity indicator that estimates communication impairment for a client

due to contention or collision. Moreover, the input path loss information used by Choi et al. does not indicate path losses between a selected client and an access point.

Nelson, Jr. et al. describe data rate allocation decisions and do not teach determining a data rate indicator that estimates an achievable data rate for communication by a selected client. Nelson, Jr. et al. calculate an excess power difference which is indicative of the amount of dynamic range available in the transmit power amplifier in a second station. A first station can then make a determination as to whether coding rates which require a higher dynamic range will be acceptable for use by the second station.

Rappaport et al. ('547) is cited as disclosing determining a cell loading indicator. However, Rappaport et al. ('547) do not teach determining a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by a selected client.

Even if, for the sake of discussion, one would look to Choi et al., Nelson, Jr. et al., and Rappaport et al. ('547) for calculation of a capacity indicator, a data rate indicator, and a cell loading indicator, there is no teaching to combine these indicators to determine a client throughput. As noted by the Examiner, Rappaport et al. ('555) discloses using different functions to calculate a throughput. As such, using parameters of the cited references in the system of Rappaport et al. ('555) would not lead a person of ordinary skill in the art to the claimed invention.

The present invention, as set forth in the claims, is particularly advantageous in that it provides a metric that takes various factors into account and quickly converts them into a measure of overall communication quality in a wireless network.

Accordingly, claims 1, 7, 13, and 19, and the claims depending therefrom, are submitted as patentable over the cited references.

The other references cited, including U.S. Patent No. 5,537,530 (Edgar et al.) and U.S. Publication Nos. 2004/0236547 (Kamali et al.) and 2003/0134641 (Gustafsson et al.), do not remedy the deficiencies of the primary references.

**III. Conclusion:**

For the foregoing reasons, Applicants believe that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,



Cindy S. Kaplan  
Reg. No. 40,043

P.O. Box 2448  
Saratoga, CA 95070  
Tel: 408-399-5608  
Fax: 408-399-5609